



**TRIBHUVAN UNIVERSITY**  
**FACULTY OF HUMANITIES & SOCIAL SCIENCES**

**Office of the Dean**  
Kirtipur, Kathmandu

*Ref. No.:.....*

**BCA, 2nd Semester, CAMT - 154 : Mathematics II Syllabus of :**

**Unit 2 : Differentiation**

Introduction, Derivatives of algebraic, trigonometric, exponential and logarithmic functions by definition (simple forms), Rules of differentiation, Derivatives of parametric and implicit functions, Higher order derivatives, Relationship between continuity and differentiability. L'Hospital's rule (for  $0/0$ ,  $\infty/\infty$ ), Differentials, Tangent and Normal, Geometric interpretation and application of Rolle's theorem and Mean value theorem,